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RUNNING HEAD: COPING IN BIPOLAR AFFECTIVE DISORDER

Coping Specificities in Bipolar Affective Disorder: Relations with Symptoms and Therapeutic  
Alliance

Ueli Kramer, Martin Drapeau, Yasser Khazaal, & Guy Bodenmann

Abstract

Ways to enhance research into coping have been suggested by Lazarus (2000). The issues of adaptiveness and conceptual structure of coping (Cramer, 1998; Skinner et al., 2003) are particularly relevant; thus, this study addresses them in a clinical research setting. A total of 30 inpatients presenting with Bipolar Affective Disorder (BD) have been interviewed twice, as well as the participants of a matched control group ( $N = 30$ ). Self-report (CISS) and observer-rater methods (CAP) of coping have been applied: low correlations were found between the instruments. Coping specificities in BD have been identified: opposition and support-seeking are most frequently practiced by BD patients, in comparison with controls. No significant link has been found between coping processes, symptom level and the therapeutic alliance. This study lends support for a quantitative definition of coping adaptiveness which is discussed, along with clinical implications on psychological treatments of BD.

Key-Words: Coping, Bipolar Affective Disorders, Opposition, Observer-Rater Method, Cognitive-Behavioral Therapy

## Coping Specificities in Bipolar Affective Disorder: Relations with Symptoms and Therapeutic Alliance

### *Coping: Assets and Challenges*

Ways of coping, understood as the individual's strategies to face stressful situations, is a central notion in cognitive psychology, research, and therapy. Coping is generally understood as a moderator variable between situational inputs and outcome (Holahan et al., 1987; Lazarus et al., 1984; Skinner et al., 2003). Fleishman (1984, p. 229, cited by Holahan et al., 1987, p. 946) defines coping as “overt and covert behaviors that are taken to reduce or eliminate psychological distress or stressful conditions”.

Beyond this minimal definition, little consensus exists in the literature on conceptualization, structure and measurement of coping (Skinner et al., 2003). The great number of empirical studies on coping, aiming at the description of coping in cross-sectional designs, certainly yielded some insight into coping processes, but also contributed, paradoxically, to its threatening disintegration as a scientific concept (see Coyne et al., 2000; Kramer, 2005a; Lazarus, 2000). Confounds with outcome variables (Coyne et al., 2000), as well as issues of delimitation of the field (a difficulty due to a “bewildering richness” of behaviors related to coping; Pearlin et al., 1978, p. 4) contributed to this confusing picture of coping research. In this article, several conceptual issues are addressed, aiming at reducing maximally these confusions (Lazarus, 2000): the degree of consciousness of coping processes, the question of good news v bad news ways of coping and the structure of coping. We will then apply the concept of coping to the specific clinical diagnosis of Bipolar Affective Disorder (BD). Systematic theory-driven coping research is sparse in this clinical field, despite its high psychological relevance, according to current clinical conceptualizations of BD (e.g., Johnson et al., 2004). We then present, test and discuss the ensuing hypotheses. Our

objective is to describe coping specificities in BD, relate them to outcome (e.g., symptom level and change) and other process variables (e.g., therapeutic alliance).

With regard to consciousness of coping, as highlighted by Cramer (1998), no consensus has been reached among researchers up till now. Certain studies argue in favor of coping being confined to conscious strategies (Parker et al., 1996; Singer et al., 1990), whereas others (Erdelyi, 1985, 1990; Lazarus et al., 1984) also accept the concept of unconscious coping. As argued by Steffens et al. (1988), referring to Lazarus et al. (1984), coping essentially responds to stress appraisal within a specific situation, generally in an automatized way. Thus, it can be at least *described* as unconscious, not always being under the individual's control. Conceptual overlap with unconscious action tendencies (Lazarus, 1991) support this argument (see also Tschuschke et al., 1994).

Another conflictual point of the coping concept is the question of adaptiveness (White, 1974). Are there “good news and bad news ways of coping” meaning that certain coping are adaptive, others not (Aldwin et al., 1987; Lazarus, 2000; Skinner et al., 2003, p. 231, from whom the afore-mentioned expression is drawn) or is any coping in any situation potentially adaptive? Lazarus (2000) argues in favor of situation-dependency of coping adaptiveness, based on individualized patterns of stress management and heuristics. In line with this, objective rules have been defined in order to evaluate an individual's coping adaptiveness in a specific situation (Reicherts et al., 1992; Reicherts, 1999). While this position radically applies the situation-dependency of coping, it is doubtful that coping adaptiveness can be evaluated reliably without taking into account the specific context of the situation, including similar – or dissimilar - situations when the individual had to face adversity. Furthermore, the possibility of dismantling contradictions in the individual's narrative – essential for clinical assessment of coping adaptiveness - is not taken into account by this approach. However, the argument of situation-dependency of coping adaptiveness suggests that coping specificities

exist as a function of specific clinical situations or diagnoses. These arguments imply that a quantitative criterion for coping adaptiveness may be applied, rather than qualitative (Costa et al., 1996; Cramer, 1998a): The more often a specific coping process is used by the same individual – thus becoming a “high-frequency coping” –, the less adaptive this same process becomes; one could talk of “rigidity” of coping patterns (see also the notion of coping inflexibility in personality disorders; Summerfeldt et al., 1996), rather than the qualitative classification of coping processes into distinctly adaptive and maladaptive processes. Finally, Skinner et al. (2003) combine both arguments – qualitative and quantitative - and point out that the prolonged use of certain ways of coping, such as helplessness, social withdrawal and opposition, indicates that the individual is “at developmental risk” (Skinner et al., 2003, p. 231). Thus, coping processes dealing with adversity appraised as a threat, if overused, may be more harmful than other types of coping.

The question of the structure of coping refers to theory-driven classifications (yielded by confirmatory factor analyses or rationale sorting), as opposed to merely empirically-driven classifications (mainly based on exploratory factor analyses; Skinner et al., 2003; see also Lazarus et al., 1974). A total of 100 attempts to structure the concept of coping have been found and criticized based on several desiderata for category systems, i.e., clarity, mutual exclusiveness, comprehensiveness, functional homogeneity and distinctiveness, generativeness and flexibility of the categories (Skinner et al., 2003, p. 219). Instead of multiplying the number of low-level ways of coping or using merely higher-order categories, the authors propose a hierarchical system of the structure of coping, based on action regulation theories (Brandstätter, 1998). Twelve categories - or “families” - of coping, distinguishable according to the nature of primary appraisal of stress (stress appraisal as threat v as challenge), domain (relatedness, competence and autonomy) and orientation (self-directed v other-directed coping), encompass a host of lower level ways of coping (e.g.,

shouldering, help-seeking, rumination). This classification is the basis used in recent observer-rater methodology (Perry et al., 2005, see Method section), which is characterized by high face validity, as it responds to desiderata formulated for category systems.

*Coping Specificities in Bipolar Affective Disorders (BD)*

Coping in BD has been addressed by only a few studies as yet. The instruments applied did not meet the high expectations of face and structure validity of coping, as defined by Skinner et al. (2003). In a general way, psychopathological states such as depressive or manic symptoms can be understood as either (1) Outcome of coping (Zeidner et al., 1996), or (2) Input stressor which the individual has to deal with by means of coping (Summerfeldt et al., 1996). In our study, we will focus on the former, even if some confounds with the latter exist in studies on coping in BD. Furthermore, particularly in BD, a highly biologically-determined mental disorder, a third possibility exists: absence of direct conceptual link between psychological processes such as coping and occurrence of symptoms and presence of a biologically-determined mediator variable.

Lam et al. (2001) and Wong et al. (1999) base their conclusions on ad-hoc interview ratings developed for measuring coping with manic prodromes (Lam et al., 1997): priority-setting prevented relapse, whereas extra-stimulation as coping increased the probability of relapse. Another study reports rumination and risk-taking as being associated with both depression and hypomania (Knowles et al., 2005; see also Nolen-Hoeksema, 1991; Nolen-Hoeksema et al., 1993, as well as Rohde et al., 1990 and Uehara et al., 1999, for coping in unipolar depression). Greenhouse et al.'s (2000) study yields a correlation between acceptance and treatment compliance in BD, whereas denial is associated with treatment non-compliance. Denial is also reported by Krober (1993) as a specificity of BD, but only after a great number of inpatient treatments. According to Paykel (2001), the nature of primary stress appraisal – together with the absence of social support as secondary appraisal – predicts

relapse in BD. When focusing on BD specificity, we assume that specific coping processes occur as a function of the clinical diagnosis as a whole, - as contextual input variable - independently from the current predominant symptomatology. Finally, in the case of BD inpatients, it is particularly important to address the question of lack of consciousness of coping, as the level of insight into their own functioning is generally low (Lam et al., 1997).

This leads us to our hypotheses: (1) Comparison between self-report and observer-rating of coping: moderate or no correlations are expected; (2) Coping specificity in BD: specific coping processes are more frequently used by BD inpatients, what may be called “high-frequency coping”; (3) High-frequency coping is associated with higher levels of symptoms; (4) Coping is related to therapeutic alliance during inpatient treatment: the more high-frequency coping, the lower the therapeutic alliance.

## Method

### *Sample*

A total of 30 inpatients with Bipolar Affective Disorders (BD) were included in the study. A total of 20 (67%) were female, with a mean age of 46.1 years (SD = 11.2 ; ranging from 21 to 60). Their socio-demographic level was assessed by means of the total number of years of education in any field. On average, the patients had 12.4 years of education (SD = 1.1 ; range from 10 to 16). All had a DSM-IV-R diagnosis of Bipolar Disorder I (either F31.x[296.4x (n = 8) or .5x (n = 7)] or F31.6[296.6x (n = 17)]) and were included in the study irrespective of the nature of the most recent phase or of the level of chronicity. Some (13; 43%) presented co-morbid disorders, such as drug abuse (23% ; cannabis, alcohol, cocaine), personality disorders cluster C (10%), compulsive-obsessive disorders (3%), acute suicidality (3%) and epilepsy (3%). Diagnoses were established by trained staff by means of SCID (Structured Clinical Interview for DSM-IV, only chapter on Bipolar Affective Disorder; First et al., 2004). The number of inpatient treatments in psychiatry, including current treatment,



varied between 1 and 29 (Mean = 7.7 ; SD = 7.0). All psychiatric treatment, including medication, was given according to clinical decision; no control was exerted on the treatment by means of the study design.

A strictly matched control group was introduced; matching criteria were gender, age and years of education, as these have an influence on coping (Labouvie-Vief et al., 1987; Whitty, 2003). A total of  $N = 30$  persons from a community sample were recruited for the study. Out of these, 20 (67%) were female, with a mean age of 41.9 (SD = 14.3 ; range from 23 to 65). Their mean number of years of education was 12.9 (SD = 1.4 ; range from 11 to 18), corresponding to intermediate education level. No inpatient treatment in psychiatry is known for these participants and general symptomatology was in the normal range for all control participants; therefore, we decided not to apply standardized diagnostic procedures to the control group. T-tests yielded no significant differences in the matching variables between the groups (see table 1). All participants gave written informed consent.

### *Instruments*

*Coping Action Patterns (CAP; Perry et al., 2005; French translation by Kramer et al., 2005).* CAP is an observer-rating system assessing coping processes based on interview-transcripts (Drapeau et al., 2005). The rating scale encompasses 12 categories of coping (based on Skinner et al., 2003). Three general domains have been identified (relatedness, competence, autonomy) encompassing each four categories (“families”) of coping. Moreover, six of the coping categories are conceived as coping with stress appraised as challenge (problem-solving, information-seeking, self-reliance, support-seeking, accommodation, negotiation) and the other six as coping with stress appraised as threat (helplessness, escape, delegation, isolation, submission, opposition). Each coping category is broken down into three action levels (affective, behavioral and cognitive). Therefore, 36 coping processes are assessed by this instrument. Relative frequencies are computed for all

coping processes. Based on Skinner et al. (2003), an Overall Coping Functioning (OCF) score can be computed (relative frequency of challenge-coping). Preliminary empirical validation data have been presented by D'Iuso et al., (2007), Drapeau et al., (2005), Drapeau et al., (2007), Perry et al., (2007) for the original English version and by Kramer et al., (in press), Kramer (2006), Kramer et al., (2007) and Kramer et al., (in press) for the French version used for this study. For the current study, reliability coefficients on 20% of the ratings were established among fully-trained raters and yielded satisfactory results in terms of intra-class correlation coefficients (2, 1; Wirtz et al., 2002) varying between .59 and .94 ( $M = .84$ ;  $SD = .10$ ). These coefficients have been established on coping as the unit of analysis (36 categories). Intra-class correlation coefficients (2, 1) with the CAP authors' group of raters vary between .51 and .83 ( $M = .71$ ;  $SD = .11$ ; the .51 score is the only one below .60).

*Coping Inventory for Stressful Situations (CISS; Endler et al., 1988; 1990).* This 48-item self-report questionnaire is empirically derived and assesses three basic dimensions of coping: task-oriented, emotion-oriented and avoidance (encompassing two factors distraction and social diversion); low correlations between the three factors are reported, internal and external validity, as well as test-retest reliability yield satisfying results (Endler et al., 1990). Subjects report coping frequency using a Likert-type scale from 1 (not at all) to 5 (a lot). The French version has been validated (Endler et al., 1998). Cronbach alpha for this patient sample is .95.

*Symptom Check List SCL-90-R (Derogatis, 1994).* This questionnaire includes 90 items addressing various somatic and psychological signs of distress. These items are scored using a Likert-type scale from 0 (not at all) to 4 (very much). Although the instrument is composed of 10 subscales, our study used only the General Symptomatic Index (GSI, score ranging from 0 to 4), which is a mean rated over all symptoms. Clinical cut-off score is 0.80. The French validation study has been carried out by Pariente et al. (1990) and yielded

satisfactory coefficients. Cronbach alpha for this sample was .98. Mean symptom level for patients is higher than for controls (see table 1; the range of the patients' scores is 0.12 to 3.17).

*Bech-Rafaelson Mania Scale (BRMS; Bech et al., 1978).* The BRMS is a clinician-rated scale for manic symptoms, based on 11 items tapping activity level, mood, and other characteristics of mania. The items are rated on a scale from 0 (normal) to 4 (extreme). Clinical cut-off score for mania is 15 (hypomania 6). The range of our patients' scores is 0 - 12. Inter-rater reliability has proven to be high (.80 - .95; Bech et al., 1978; Altman, 2004). BPRS is effective in assessing outcome in clinical trials on BD (Bech, 2002). The French translation has been realized by Chambon et al. (1989). Cronbach alpha for our patient sample was .77.

*Montgomery-Asberg Depression Rating Scale (MADRS; Montgomery et al., 1979).* MADRS is a clinician-rated scale for depressive symptoms, including among others items on sadness, internal tensions, insomnia, appetite reduction, cognitive impairment and suicidal ideation. The 10 items are anchored on a scale from 0 (absence of symptoms) to 6 (invalidating presence of symptoms). Clinical cut-off score for depression is 15. The range of our patients' scores is 0 - 38. Several validation studies have reported satisfactory coefficients for the original version (Montgomery et al., 1979) and concurrent validity (Kearns et al., 1982; Maier et al., 1985). The French translation has been realized by Lemperière et al. (1984) and validation studies on this version yield satisfactory coefficients on specificity, homogeneity, internal consistency (Pellet et al., 1987). Cronbach alpha for our patient sample was .89.

*Working Alliance Inventory (WAI; Horvath, 1981; Horvath et al., 1989).* The WAI is originally a 36-item self-report measure assessing the quality of the therapeutic alliance according Bordin's conception (1975). Responses are reported on a 7-point Likert-type scale

ranging from 1 (never) to 7 (always). Construct validity has been established by Malinckrodt et al. (1991), reliability for the whole scale ranges between .84 and .93 (Horvath, 1994).

Concurrent and predictive validity have been established (Tichenor et al., 1989; Shick Tryon et al., 1993). A 12-item short version has been developed by Tracey et al. (1989), based on factor-analytic procedures. Its French translation has been validated by Corbière et al. (2006) who suggest one general score be considered for the evaluation of alliance. The 12-item-version has been used for this study. Cronbach alpha for this patient sample was .87.

### *Procedure*

All patients and controls were asked to participate in a dynamic interview (Perry et al., 2005) lasting 50 minutes. Dynamic interview (DI) as a research tool has been developed from clinical practice of psychodynamic psychotherapy; thus, the context of DI is comparable to the context of an intake psychotherapy interview (Perry, personal communication). It has been widely used in psychotherapy research (Perry et al., 1989 ; Hoglend et al., 1998). As shown by Perry et al. (2005) and Fowler et al. (2005), high-quality dynamic interviews are associated with Interviewer's and Overall Dynamic Interview Adequacy (I-DIA and O-DIA). Five tasks of the interviewer compose the I-DIA : (1) Setting the interview frame : work-enhancing strategies ; (2) Offering support : questions, support strategies, associations ; (3) Exploration of affect : questions, reflections, clarifications, low-level defense interpretations ; (4) Trial interpretations : defense and transference interpretations; (5) Offering a synthesis. In particular, exploring affect and trial interpretations are highly correlated with O-DIA, when the patient's contribution is controlled for (Perry et al., 2005). All interviews were conducted in French by the first author. For this study, we used the dynamic interview paradigm as a comparable context to intake interview and will not report the detailed results for each patient; its external validity is therefore very high (Perry et al., 1989).

All inpatients participated in the dynamic interview, as soon as their symptomatic state allowed it. This means that the patients were included in the final third of the duration of inpatient treatment, shortly before discharge. Only two patients had to be excluded from the study due to non-feasibility of the research interview; all other patients responding to the inclusion criteria and willing to participate were included. The patients were given treatment as usual, encompassing non-specific supportive therapy and medication. Along with the dynamic interview, the evaluation procedure encompassed clinician-ratings of depression and mania. The patients were given the questionnaires at the end of the interview and were asked to fill them in and send them back within two days. The study was endorsed by the expert ethical committee of the psychiatric hospital.

The control group was recruited by means of two local institutions : (1) School of Social Studies ( $n = 17$ ) ; (2) Association promoting Community Activities and Service ( $n = 13$ ). Matching criteria were transparently issued at the outset of the control group recruitment. Therefore, only nine participants had to be refused from participation due to failure to meet the matching criteria. The control participants, unlike the patients who were not paid, were given a contribution (the equivalent of USD 16). The study was endorsed by the expert ethical committee of the School of Social Studies.

All interviews were tape-recorded and transcribed by Master's-level psychology students, according to the method defined by Mergenthaler et al. (1997).

Interviews were rated based on the transcripts. In-depth training and supervision was organized for all raters. Four Master's-level psychology students were trained during four months by the author and reliability was established on a dyadic basis among the student raters, between the student raters and the trainer and between the student raters and the authors of the CAP-method. A randomly chosen 20% of all interviews was rated by two raters

independently, in order to establish inter-rater reliability checks (results see under Instruments).

### *Data Analytic Strategy*

Canonical correlations were carried out (only on the patient's sessions) in order to test our first hypothesis. We avoided the use of a set of Pearson's correlations, due to the multiplication of errors ensuing from multiple hypothesis testing; according to Tabachnik et al. (1996), canonical correlations as multivariate statistics control optimally for such flaws and are known to maximize inter-correlations between the two sets of variables. MANOVAs were performed to test our second hypothesis. Linear regressions were carried out in order to test the relationship between coping, symptom level and with the therapeutic alliance. Bonferroni's correction was introduced where necessary.

## Results

### *Comparison Between Self-Report and Observer-Rating of Coping*

Canonical correlations on  $N = 30$  BD patients between CAP (36 dimensions plus OCF) and CISS (5 dimensions), yielded an overall  $r$  of .16 ( $t = 0.81$ , ns). The CISS subscale task-oriented coping correlated with four CAPs and with OCF ( $r = .46$ ): information-seeking affective ( $r = -.42$ ), helplessness affective ( $r = -.42$ ), accommodation behavioral ( $r = -.49$ ), and negotiation cognitive ( $r = .45$ ). Finally, CISS emotion-focused coping correlates with CAP opposition affective ( $r = .42$ ) and CISS escape with CAP submission cognitive ( $r = -.41$ ). No other correlations were significant.

### *Coping Specificities in BD Patients*

Multivariate statistics on the first session yielded five CAP and two CISS factors being different between BD patients and parallelized controls, thus lending support for coping specificities (see table 2). CAP self-reliance behavioral and CISS task-oriented coping are less often practiced by the patients, whereas CAP support-seeking both affective and behavioral

and opposition both affective and behavioral, along with CISS distraction, are more frequently practiced by patients, compared to controls. Moreover, OCF has proven to be lower in patients, compared to controls. Thus, opposition, support-seeking (affective and behavioral) and distraction are the only high-frequency coping in BD. Effect sizes ( $d$ ) of these between-group differences are moderate to high (the latter is true for OCF, self-reliance behavioral, opposition affective and behavioral).

No effect for either of these variables was observed when we compared subgroups of patients according to their predominant symptomatology, mania or depression (median-split method applied).

#### *Frequency of Coping, Symptom Level and Therapeutic Alliance*

Regression analyses on coping predicting the symptom level, whether general symptomatic level (GSI) or specifically mania or depression, did not yield any significant links. No significant links were found with regard to coping processes predicting the therapeutic alliance at first session.

### Discussion

The results partially confirm our hypotheses. The first aimed at comparing self-report measure and observer-rater method: only a few moderate, otherwise low, correlations have been found between CAP and CISS; overall correlation is not significant. There seems to be limited overlap in the perception of coping frequency between the subject and the independent observer; the subject is probably unaware of parts of his/her functioning. This conclusion is corroborated by the observation that specific CAPs (e.g., opposition and support-seeking) differ between the groups, whereas corresponding CISS (e.g., emotion-factor being conceptually and empirically close to opposition, see canonical correlation) do not differ. This lack of empirical correspondence can also be due to conceptual differences in the construction of the two scales.

As far as the question of the coping specificity in BD is concerned, we observed a between-group effect - with 1.20 the highest effect size found - on a general level of coping adaptiveness (OCF); patients present lower Overall Coping Functioning, compared to controls. In addition, we found three high-frequency coping: CAP opposition (affective and behavioral), CAP support-seeking (affective and behavioral) and CISS distraction, along with low frequencies in BD of several others (CAP self-reliance and CISS task). The high frequency of opposition suggests its maladaptive character in the dynamics of stress management (Cramer, 1998a; Skinner et al., 2003). The observation that these effects disappear when comparing subgroups, as a function of predominant symptomatology, adds a strong argument in favor of coping specificity of BD as a whole, irrespective of symptomatic phase.

Overall, the absence of significant links between symptom level, alliance and coping processes in the first session suggests the presence of limited conceptual overlap and, thus, underlines a clear-cut distinction between coping and symptoms; we may conclude that there are very limited confounds in this study, occasionally observed between coping and outcome (Coyne et al., 2000; Lazarus, 2000). The absence of link between coping and symptom level can also be explained by the presence of biological mediators in BD (see Goodwin, & Jamison, 1990). This implies also that opposition as BD *inpatient* specificity is a situation-dependent, and not person-dependent, process.

Therapeutic practice might be improved if the clinician is aware that opposition can be high-frequency coping, particularly in inpatient treatment, when it is likely to be a vulnerability factor in BD. An adequate therapeutic attitude when confronted with oppositional behaviors or stances in inpatients includes empathic limit-reminding, augmenting self-observational capacities, Socratic dialogue and eventually clarifying experiential and emotion-focused work on the underlying motives and contents related with opposition, aiming



at decreasing the level of opposition, and ultimately leading to better adaptation to reality.

Moreover, enhancement of capacities in self-reliance and task-oriented coping by means of effective training is warranted.

This study confirms the importance of fine-grained analysis of coping in specific clinical diagnoses (Lazarus, 2000), and supports not only the relevance of the quantitative conception of adaptiveness (Cramer, 2000), but also tentatively the basic distinction of stress-appraisal in terms of challenge and threat (Lazarus et al., 1984; Skinner et al., 2003; Perry et al., 2005). More studies using the same methodology on other psychopathological states, e.g., personality disorders, are needed in order to shed additional light on the conclusions drawn. There are several limitations to this study. First, the low sample size implies to be very cautious when interpreting the results. Moreover, results on coping specificity are limited, due to co-morbidity in the sample. No clear conclusion can be drawn with regard to the consciousness of coping, since the two instruments aimed at measuring different dimensions of coping. Ideally, both measures should be based on the same theoretical structure of coping; this was not the case in our research; the CAP was based on the confirmatory factor analysis by Skinner et al. (2003), whereas CISS was based on Endler et al.'s (1990) empirical analysis. Psychiatric treatment, i.e., medication, psychotherapy, given to the patients was state-of-the-art and not controlled by the research; our results might be influenced by this variable. Participants in the control group were not randomly chosen, which is due to matching procedure and the voluntary status of participation and as a result, their coping profiles are not representative of the general population; great care needs to be taken with generalizations.

## References

Aldwin CM, Revenson, TT. Does coping help ? A reexamination of the relation between coping and mental health. *J Pers Soc Psychol* 1987; 53: 337-348

- Altman E. Differential Diagnosis and Assessment of adult bipolar disorder. In: Johnson SL, Leahy RL (Eds) *Psychological Treatment of Bipolar Disorder*. New York: The Guilford Press; 2004: 35-57
- Bech P. The Bech-Rafaelson Mania Scale in clinical trials of therapies for bipolar disorder: A 20-year review of its use as an outcome measure. *CNS Drugs* 2002; 16: 47-63
- Bech P, Rafaelson OJ, Kramp P, Bolweg TG. The mania rating scale: Scale construction and inter-observer agreement. *Neuropharmacology* 1978; 17; 430-431
- Bordin ES. The working alliance: Basis for a general theory of psychotherapy. Paper presented at the Meeting of the Society for Psychotherapy Research, Washington, D.C; 1975
- Brandstätter J. Action perspectives on human development. In: Damon W, Lerner RM (Eds) *Handbook of Child Psychology: Vol. 1. Theoretical Models of Human Development*. New York: Wiley; 1998; 807-863
- Chambon O, Poncet F, Kiss L. Echelles d'anxiété, de manie, de dépression, de schizophrénie [Scales for Assessment of Anxiety, Mania, Depression, Schizophrenia]. Paris : Masson 1989
- Corbière M, Bisson J, Lauzon S, Richard N. Factorial validation of a French short-form of the Working Alliance Inventory. *Int J Methods Psychiatr Res* 2006; 15(1): 36-45
- Costa PT, Somerfield MR, McCrae RR. Personality and coping: A reconceptualization. In: Zeidner M, Endler NS (Eds) *Handbook of Coping: Theory, Research, Applications*. New York: Wiley; 1996: 44-61
- Coyne JC, Racioppo MW. Never the twain shall meet ? Closing the gap between coping research and clinical intervention research. *Am Psychol* 2000; 55: 637-646
- Cramer P. Coping and Defense Mechanisms : What's the difference ? *J Pers* 1998; 66(6): 919-946

- Derogatis LR. Symptom Checklist-90-Revised : Administration scoring and procedures Manual (3rd Edition). Minneapolis MN: National Computers Systems 1994
- D'Iuso D, Blake E, Drapeau M. An investigation of the relationship of Cognitive Errors and Coping Action Patterns with the Therapeutic Alliance. Canadian Psychological Association Annual Convention. Ottawa 2007
- Drapeau M, Perry JC. Observer ratings of coping and cognitive errors : The Cognitive Errors and Coping Action Patterns (CECAP) method. Paper presented at the Annual Meeting of the Society for Psychotherapy Research. Montreal 2005
- Drapeau M, Perry JC, Blake E, D'Iuso D. A pilot study of the validity and reliability of the CECAP method. Canadian Psychological Association Annual Convention. Ottawa 2007
- Endler NS, Parker JDA. The assessment of coping: The multidimensional coping inventory. York: Departement of Psychology Reports, York University, 174 1988
- Endler NS, Parker JDA. Multidimensional assessment of coping: a critical evaluation. J Pers Soc Psychol 1990; 58: 844-854
- Endler NS, Parker JDA. CISS. Inventaire de Coping pour situations stressantes. Manuel. Adaptation française par J.-P. Rolland. Paris : Les Editions du Centre de Psychologie Appliquée 1998
- Erdelyi MH. Psychoanalysis: Freud's cognitive psychology. New York: Freeman 1985
- Erdelyi MH. Repression, reconstruction and defense: History and integration of the psychoanalytic and experimental frameworks. In: Singer JL (Ed) Repression and dissociation. Chicago: University of Chicago Press 1990: 1-32
- First MB, Spitzer RL, Williams JBW, Gibbons M. Structured Clinical Interview for DSM-IV. New York: Biometrics Research Dpt 2004
- Fleishman JA Personality characteristics and coping patterns. J Health Soc Behav 1984; 25: 229-244

- Fowler JC, Perry JC. Clinical tasks of the dynamic interview. *Psychiatry : Interpers Biol Processes* 2005; 68(4): 316-336
- Goodwin FK, Jamison KR. Manic-depressive illness. New York: Oxford University Press 1990
- Greenhouse WJ, Meyer B, Johnson SL. Coping and medication adherence in Bipolar Disorder. *J Affect Disord* 2000; 59: 237-241
- Hoglend P, Perry JC. Defensive functioning predicts improvement in major depressive episodes. *J Nerv Ment Dis* 1998; 186: 1-7
- Holahan CJ, Moos RH. Personal and contextual determinants of coping strategies. *J Pers Soc Psychol* 1987; 52: 946-955
- Horvath AO. An exploratory study of the working alliance: Its measurement and relationship to therapy outcome. Unpublished doctoral dissertation. University of British Columbia, Canada 1981
- Horvath AO. Empirical validation of Bordin's pantheoretical model of the alliance: The Working Alliance Inventory perspective. In: Horvath AO, Greenberg LS (Eds) *The working alliance: Theory, research, and practice*. New York: John Wiley; 1994: 109-130
- Horvath AO, Greenberg LS. The development and validation of the Working Alliance Inventory. *J Counsel Psychol* 1989; 36: 223-233
- Johnson SL, Leahy RL. *Psychological Treatment of Bipolar Disorder*. New York: The Guilford Press 2004
- Kearns NP, Cruickshank CA, McGuigan KJ, Riley SA, Shaw SP, Snaith RP. A comparison of depression rating scales. *Br J Psychiatry* 1982; 141: 45-49
- Knowles R, Tai S, Christensen I, Bentall R. Coping with Depression and vulnerability to mania: A factor analytic study of the Nolen-Hoeksema (1991) Response Styles Questionnaire. *Br J Clin Psychol* 2005; 44: 99-112

- Kramer U. La mesure du coping : une revue clinique des instruments[The Measure of Coping : A Clinical Review of Instruments]. J Ther Comp Cog 2005 ; 15(2) : 46-54
- Kramer U. Cognitive Errors and Coping Action Patterns: New Strategies of Conceptualization. Poster presented at the Herbstakademie. Ascona, Switzerland 2006
- Kramer U, de Roten Y, Michel L, Despland, JN. Early Change in Defense Mechanisms and Coping in Short-Term Dynamic Psychotherapy: Relations with Symptoms and Alliance. Clin Psychol Psychoth; in press
- Kramer U, Drapeau M. Etudes de validation de la version française des échelles de codage du coping et des erreurs cognitives (CE-CAP) sur un échantillon de tout-venants[Validation studies of the French Version of the Rating Scales on Coping and Cognitive Errors (CE-CAP) on a community sample]. Ann Med-Psychol : in press
- Kramer U, Drapeau M, Perry JC, Bodenmann G, Despland JN, de Roten Y. Observer Rater Methodology for Assessment of Adaptational Processes in Bipolar Affective Disorders. Paper presented at the Annual Meeting of the Society for Psychotherapy Research. Madison, USA 2007
- Krober HL. Krankheitserleben und Krankheitsverarbeitung bipolar manisch-depressiver Patienten[Experiencing and Coping with Illness in Bipolar manic-depressive Patients]. Fortschr Neurol-Psychiatr 1993; 61(8): 267-73
- Labouvie-Vief G, Hakim-Larson J, Hobart CJ. Age, Ego level, and the Life-Span Development of Coping and Defense Processes. Psychol Aging 1987; 2(3): 286-293
- Lam DH, Wong G. Prodromes, coping strategies, insight and social functioning in bipolar affective disorders. Psychol Med 1997; 27: 1091-1100
- Lam DH, Wong G, Sham P. Prodromes, coping strategies and course of illness in bipolar affective disorder – a naturalistic study. Psychol Med 2001; 31: 1397-1402
- Lazarus RS. Emotion and Adaptation. Oxford: Oxford University Press 2001

Lazarus RS. Toward better Research on Stress and Coping. Am Psychol 2000; 55(6): 665-673

Lazarus RS, Averill JR, Option EM Jr. The Psychology of Coping: Issues of Research and Assessment. In: Coelho GV, Hamburg DA, Adams JE (Eds) Coping and Adaptation. New York: Basic Books; 1974: 249-315

Lazarus RS, Folkman S. Stress, Appraisal and Coping. New York: Springer 1984

Lemperière T, Lepine JP, Rouillon F, Hardy P, Ades J, Luauté JP, Ferrand I. Comparaison de différents instruments d'évaluation de la dépression à l'occasion d'une étude sur l'ATHYMIL 30 mg. Ann Med-Psychol 1984; 142: 1206-1212

Maier W, Philipp M. Comparative analysis of observer depression scales. Acta Psychiatr Scand 1985; 72 : 239-245

Malinckrodt B, Nelson ML. Counselor training level and the formation of the psychotherapeutic working alliance. J Counsel Psychol 1991; 38: 133-138

Mergenthaler E, Stigler, M. Règles de transcription pour la recherche en psychothérapie (adaptation française)[Transcribing rules for Psychotherapy Research (French adaptation)]. Psychothérapies 1997; 17(2) : 97-103

Montgomery SA, Asberg M. A new depression scale designed to be sensitive to change. Br J Psychiatr 1979; 13: 382-389

Nolen-Hoeksema S. Responses to depression and their effects on the duration of depressed mood. J Abnorm Psychol 1991; 100(4): 569-582

Nolen-Hoeksema S, Morrow J. Effects of rumination and distraction on naturally occurring depressed mood. Cog Emot 1993; 7(6): 561-570

Pariente P, Guelfi JD. Inventaires d'auto-évaluation de la psychopathologie chez l'adulte. 1<sup>ère</sup> partie : Inventaires multidimensionnels[Self-Report Inventories of Adult Psychopathologie. 1st part : Multidimensional Inventories] . Psychiatr Psychobiol 1990; 5: 49-63

- Parker JD, Endler NS. Coping and defense: A historical review. In: Zeidner M, Parker NS.(Eds) Handbook of coping: Theory, research, applications. New York: Wiley; 1996: 3-23
- Paykel ES. Stress and affective disorders in humans. *Sem Clin Neuropsychiatr* 2001; 6(1): 4-11
- Pearlin LI, Schooler C. The structure of coping. *J Health Soc Behav* 1978; 19: 2-20
- Pellet J, Decrat M, Lang F, Chazot L, Tatu P, Blanchon Y, Berlier JM. Description d'un échantillon de 300 échelles MADRS portant sur les sujets déprimés[Description of a sample of 300 MADRS scales on depressed subjects]. *Ann Med-Psychol* 1987; 145 : 170-175
- Perrez M, Reicherts M. Stress, coping and health. Seattle: Hogrefe & Huber 1992
- Perry JC, Cooper SH. An empirical study of defense mechanisms I : Clinical Interview and life vignette ratings. *Arch Gen Psychiatr* 1989; 46: 444-452
- Perry JC, Drapeau M, Dunkley D, Blake E. The Coping Action Patterns rating system. Montréal : McGill University 2005
- Perry JC, Drapeau M, Dunkley D, Foley E, Blake E, Banon E. Changes in cognitive errors and coping action patterns following 20 sessions of either dynamic psychotherapy or CBT for acute recurrent depression. Paper presented at the Annual Meeting of the Society for Psychotherapy Research. Madison, USA 2007
- Perry JC, Fowler JC, Semeniuk TT. An investigation of tasks and techniques associated with dynamic interview adequacy. *J Nerv Ment Dis* 2005; 193(2): 136-139
- Reichert M. Comment gérer le stress? Le concept des règles cognitivo-comportementales[How to Cope with Stress ? The Concept of Cognitive-Behavioural Rules]. Fribourg : Editions Universitaires 1999
- Rohde P, Lewinsohn PM, Tilson M, Seeley JR. (1990). Dimensionality of coping and its relationship to depression. *J Pers Soc Psychol* 1990; 58: 499-511

- Shick Tryon G, Kane AS. Relationship of working alliance to mutual and unilateral termination. *J Counsel Psychol* 1993; 40: 33-36
- Singer JL, Sincoff JB. Beyond repression and the defenses. In: Singer JB. (Ed) *Repression and Dissociation*. Chicago: University of Chicago Press; 1990: 471-496
- Skinner EA, Edge K, Altman J, Sherwood H. Searching for the structure of coping : a review and critique of category systems for classifying ways of coping. *Psychol Bull* 2003; 129: 216-269
- Steffens W, Kächele H. Abwehr und Bewältigung – Mechanismen und Strategien. Wie ist eine Integration möglich?[Defense and Coping – Mechanisms and Strategies. How is an integration possible?] In: Kächele H, Steffens W (Eds) *Bewältigung und Abwehr: Beiträge zur Psychologie und Psychotherapie schwerer körperlicher Krankheiten*. Berlin: Springer; 1988: 1-50
- Summerfeldt LJ, Endler NS. Coping with Emotion and Psychopathology, In: Zeidner M, Endler NS (Eds) *Handbook of Coping. Theory, Research, Applications*. New York: John Wiley; 1996: 602-639
- Tabachnick BG, Fidell L. *Using Multivariate Statistics*. Third Edition. NY: Harpercollins College Publishers 1996
- Tichenor V, Hill CE. Alliance. *Psychother* 1989; 26: 195-199
- Tracey TJ, Kokotovic AM. Factor Structure of the Working Alliance Inventory. *Psychological Assessment: A J Consult Clin Psychol* 1989; 1(3): 207-210
- Tschuschke V, Pfeleiderer K, Denzinger R, Hertenstein B, Kächele H, Arnold R. Coping bei Knochenmarktransplantation[Coping with bone-marrow transplantation]. *Psychother, Psychosom, Med Psychol* 1994; 44: 346-354
- Uehara T, Sakado K, Sato T, Someya T. Relationship between Stress Coping and Personality in Patients with Major Depressive Disorder. *Psychother Psychosom* 1999; 68: 26-30



White RW. Strategies of Adaptation: An Attempt at Systematic Description. In: Coelho, GV, Hamburg, DA, Adams JE (Eds) Coping and Adaptation. New York: Basic Books; 1974: 47-68

Whitty MT. Coping and defending: age differences in maturity of defence mechanisms and coping strategies. *Aging Ment Health* 2003; 7(2): 123-132

Wirtz M, Caspar F. Beurteilerübereinstimmung und Beurteilerreliabilität[Inter-rater accordance and inter-rater reliability]. Göttingen: Hogrefe 2002

Wong G, Lam D. The development and validation of the coping inventory for prodromes of mania. *J Aff Dis* 1999; 53: 57-65

Zeidner M, Saklofske D. Adaptive and Maladaptive Coping. In: Zeidner M, Endler NS (Eds) *Handbook of Coping. Theory, Research, Applications*. New York: John Wiley; 1996: 505-531

Table 1

## Socio-Demographics and Symptoms for Patients and Controls

Criteria	Patients ( <i>N</i> = 30)		Controls ( <i>N</i> = 30)		<i>T</i> (1,58)	<i>p</i>
	Mean	SD	Mean	SD		
Age	46.1	11.2	41.1	14.3	1.28	0.12
Education ( <i>N</i> Years)	12.4	1.1	12.9	1.4	-1.59	0.21
Gender (Female)	67%		67%			
Intimate relationship <sup>1</sup>	37%		40%			
Life situation						
With partner	30%		30%			
With partner & siblings	3%		7%			
Alone	43%		40%			
Alone with siblings	10%		10%			
With parents	7%		13%			
Institution	7%		0%			
WAI	63.0	14.0				
GSI	1.2	0.9	0.5	0.2	4.47	0.00
Mania (BRMS) <sup>2</sup>	3.1	2.9				
Depression (MADRS) <sup>2</sup>	12.9	10.4				

*Note.* WAI: Working Alliance Inventory; GSI : General Symptom Index of Symptom

Checklist SCL-90-R.

<sup>1</sup>Considered as stable intimate relationship when lasting longer than 2 years

Table 2

Coping Specificities in Bipolar Affective Disorder: First Session ( $N = 30$ )

	Patients		Controls		<i>F</i> (1, 58)	<i>ES</i>
Coping	M	SD	M	SD		
<hr/>						
CAP						
Total coping	19.6	7.0	22.8	9.4	2.24	0.38
OCF	.5	.2	.7	.2	22.34**	1.20
Problem-solving						
Affective	0.0	0.0	0.0	0.0	.	.
Behavioral	1.3	3.2	1.2	2.6	0.02	0.04
Cognitive	0.5	1.7	2.9	5.8	4.47	0.56
Info-seeking						
Affective	0.8	2.0	0.6	1.9	0.17	0.11
Behavioral	3.7	5.6	4.9	6.8	0.53	0.19
Cognitive	3.0	6.0	4.6	6.7	0.95	0.25
Helplessness						
Affective	3.0	5.3	2.6	4.6	0.12	0.09
Behavioral	1.2	2.0	1.0	2.3	0.10	0.08
Cognitive	2.4	3.7	1.5	2.2	1.39	0.31
Escape						
Affective	0.9	1.9	0.8	2.1	0.04	0.05
Behavioral	2.7	4.4	4.1	4.2	1.54	0.32
Cognitive	11.3	10.7	6.6	7.0	4.17	0.54
Self-Reliance						
Affective	1.1	2.2	2.5	4.9	1.93	0.36

Behavioral	4.7	7.9	13.4	10.4	13.23**	0.95
Cognitive	5.7	6.0	6.9	5.6	0.64	0.21
Support-Seeking						
Affective	3.4	5.0	1.3	3.1	3.87*	0.51
Behavioral	6.8	4.8	3.9	4.6	5.66*	0.61
Cognitive	1.9	3.8	4.6	12.6	1.24	0.29
Delegation						
Affective	3.1	5.0	1.7	3.2	1.75	0.34
Behavioral	2.6	4.3	1.7	3.8	0.77	0.23
Cognitive	0.5	1.6	0.4	2.0	0.09	0.08
Isolation						
Affective	1.1	2.8	0.3	1.1	1.77	0.35
Behavioral	1.6	2.7	1.8	3.6	0.05	0.06
Cognitive	0.4	1.8	0.7	2.3	0.22	0.12
Accommodation						
Affective	1.0	2.6	1.8	2.9	1.32	0.30
Behavioral	3.7	5.2	4.2	4.7	0.12	0.09
Cognitive	5.3	5.8	9.6	8.4	5.23	0.59
Negotiation						
Affective	0.2	0.9	0.4	1.3	0.74	0.22
Behavioral	1.3	3.3	2.1	4.0	0.78	0.23
Cognitive	1.4	3.1	2.5	3.2	2.05	0.37
Submission						
Affective	0.6	1.9	0.8	2.3	0.08	0.07
Behavioral	6.3	7.2	3.9	5.8	2.16	0.38

Cognitive	0.9	2.2	0.6	2.0	0.35	0.16
Opposition						
Affective	7.2	8.5	1.8	3.0	10.93**	0.85
Behavioral	5.7	6.6	0.8	1.5	15.86**	1.03
Cognitive	2.6	3.8	1.6	3.4	1.22	0.29
CISS <sup>a</sup>						
Task	38.7	19.9	48.9	8.1	6.30*	0.71
Emotion	56.6	16.2	49.6	9.6	3.70	0.54
Escape	53.2	14.9	47.4	7.9	3.20	0.51
Distraction	56.0	14.9	47.4	7.9	4.84*	0.75
Social Diversion	48.2	12.0	45.8	8.7	0.69	0.23

*Note.* MANOVA: Problem-solving:  $F(2; 57) = 2.38; p = 0.10$ ; Information-seeking:  $F(3; 56) = 0.56; p = 0.65$ ; Helplessness:  $F(3; 56) = 0.52; p = 0.67$ ; Escape:  $F(3; 56) = 1.83; p = 0.15$ ; Self-Reliance:  $F(3; 56) = 5.24; p = 0.00$ ; Support-Seeking:  $F(3; 56) = 3.69; p = 0.02$ ; Delegation:  $F(3; 56) = 0.94; p = 0.43$ ; Isolation:  $F(3; 56) = 0.68; p = 0.57$ ; Accommodation:  $F(3; 56) = 1.95; p = 0.13$ ; Negotiation:  $F(3; 56) = 1.28; p = 0.29$ ; Submission:  $F(3; 56) = 0.79; p = 0.50$ ; Opposition:  $F(3; 56) = 8.12; p = 0.00$ ; CISS:  $F(5; 45) = 3.53; p = 0.01$ ; Bonferroni's correction applied where necessary (significance level 0.01/12 or 0.05/12).

ES: Effect size; CAP: Coping Action Patterns; OCF: Overall Coping Functioning; CISS: Coping Inventory for Stressful Situations

<sup>a</sup> T-scores reported;  $n = 22$  for patients;  $n = 29$  for controls

\*  $p < 0.05/12$ ; \*\*  $p < 0.01/12$